Rocket JUNIDENTIAL

PROGRESS REPORT

FOR

APRIL 1956

ON

4-INCH ROCKET

DOC TO REV DATE 29 MAY DIS 373

ORIG GOMP SE OPI SE TYPE 03

ORIG GLASS M PAGES 2 REV GLASS C

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ORIGINAL CL DY 23 5979

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REASON 3 & 3/

1210-E-1

May 21, 1956

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Several rockets were fired this month to evaluate fin design and to determine powder requirements for the thousand meter range. Three of six units used two, seven inch grains, separated by an X-trap. By this means, a greater length of powder can be employed in a single tube.

A rail launcher was designed in the form of a V-trough which gave support to the head and lateral guidance to the fins. Each of the models tested in this launcher experienced considerable change in lateral angle as it left the launcher, so its use was discontinued. Another identical rocket, fired from the old launcher, flew satisfactorily, however, suffering a 300 foot reduction in range due to an estimated 20 m.p.h. head wind.

Another more accurate version of the boxed rail launcher was built. Three new rockets were constructed, designed to carry 22 ounces of payload and with a range of 1000 meters at burst point. These were fired from the new launcher and landed in a circle 60 meters in diameter, directly in line with the aimed target area. On two of these units the angle of fall was measured to be 63 degrees, thus implying a higher drag factor than was anticipated.

Future Work

Studies of the drag and its causes are under way and methods of reducing the drag are being investigated.

Static tests of the 3000 meter model will start as soon as new materials arrive. Permission is being requested to extend our present range for flight tests of this model.

Financial Statement

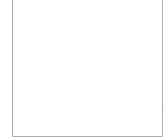
Total Amount of Contract (Phase II)

Obligations for April, 1956

Total Obligations to April 30, 1956

Balance of Contract

Expiration Date - June 30, 1956



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